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Abstract

We study how giving depends on income and luck, and how culture and information about the determinants of others' income affect this relationship. Our data come from an experiment conducted in two countries, the US and Spain, which have different beliefs about how income inequality arises. We find no cross-cultural differences in giving when individuals are informed about the determinants of income, but when uninformed, Americans give less than Spanish. Culture and information not only affect individual giving, but also the determinants of giving and the beliefs about how income inequality arises. Beliefs partially moderate cross-cultural differences in giving.

JEL Classifications: C91, D64, D83
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1. Introduction

European governments are significantly more redistributive than the US government with more progressive tax system and more generous social programs (Alesina et al., 2001; Alesina and Glaeser, 2004). While Americans have higher charitable giving relative to other countries,[1] redistribution from the rich to the poor is much more extensive in Europe than in the US (even accounting for significant differences in charitable giving). For example, EU countries on average have about twice as much governmental spending on individual consumption (health care, housing, education, etc.) than the US.[2] In this paper we study whether the difference in redistribution rates are due to differences in preferences (i.e., Europeans are more altruistic) or whether this is due to differing beliefs about how income inequality arises.

Alesina and Glaeser (2004) argue that comparing only the welfare states would not be enough to conclude Europeans are more altruistic.[3] An important piece of the explanation why different cultures have different giving norms may rely on beliefs about how income inequality arises (Alesina et al., 2001; Benabou and Tirole, 2006; Fernández, 2010). Those who believe economic outcomes mainly depend on individual effort may oppose redistribution towards poor individuals, since they believe that poverty is most likely due to slacking. On the other hand, those who believe that other factors not under an individual's control (such as luck) determine economic outcomes may be more in favor of redistribution to the poor.

To examine how individuals condition their giving on income and luck, and how culture affects this relationship, we conduct a controlled laboratory experiment in the US and Spain.[4]

[1] According to the World Giving Index (2014) the US is the most charitable country in the world.
[2] According to OECD, in 2013, average governmental spending for EU countries was almost 13 percent, whereas American spending was about 6 percent.
[3] For example, Americans could derive higher utility from giving, or they may have a preference for being able to choose where to spend their money instead of paying larger taxes.
[4] Our study is therefore related to cross-cultural studies in giving norms across cultures (Roth et al., 1991; Anderson et al., 2000; Henrich et al., 2001; Cason et al., 2002; Guiso et al., 2006; Herrman et al., 2008).

According to the World Values Survey (1995), 68% of respondents in Spain said "poverty is due to unfair society" while only 16% said "poverty is due to laziness and lack of willpower." These results place Spain on the other side of the spectrum with respect to the US, where these percentages are 30% and 48%, respectively.[5] Therefore, higher redistributive norms in Spain compared to the US could be the result of differences in beliefs about how income inequality arises (Alesina and Angeletos, 2005).[6] To test this hypothesis, we examine how giving differs across cultures when individuals are uninformed (versus informed) about the determinants of others' income. As opposed to naturally occurring data, our controlled environment shuts down the possibility of differences in government redistribution policies (Alesina and Glaeser, 2004) or differences in wages (Auten et al., 2002) influencing individual giving.[7] Hence, our experiment is able to isolate the innate differences across cultures in preferences for giving, if any, and how these preferences are impacted by beliefs about how income inequality arises.

There are several novel methodological features of our experimental design. First, in our experiment, income is determined by individual performance and luck. In most studies, income is either randomly determined by the experimenter or it depends solely on individual performance (Konow, 2000; Andreoni, 2006; Vesterlund, 2006).[8] In contrast, in our experiment,

[5] The US and Spain have been the focus of other cross-cultural experimental studies. For example, Alm et al. (1995) and Alm and Torgler (2006) find higher tax compliance in the US compared to Spain. Brandts et al. (2004), however, do not find any significant differences in contributions to a public good across the US, Spain, Japan and the Netherlands.

[6] Alesina and Angeletos (2005) provide a theoretical model suggesting that Europe has higher redistribution policies than the US because Europeans believe that luck and connections have strong effects on wealth, whereas Americans believe that personal effort determines wealth.

[7] Another reason for cross-cultural differences in giving may be due to inherent differences in income. For example, according to the OECD Better Life Index (2015), the average net-adjusted disposable income per capita in the US is 41,355 USD a year, while in Spain it is 22,477 USD. However, there is no clear evidence about the relationship between income and giving. While Eckel et al. (2007) find a positive relationship, Auten et al. (2000) find a U-shaped relationship between income and giving. Some studies do not find any significant relationship at all (Andreoni and Vesterlund, 2001; Buckley and Croson, 2006).

[8] There are some studies in which income is determined by both performance and luck (Cappelen et al., 2007; Erkal et al., 2011; Rubin and Sheremeta, 2015). There are also studies examining the demand for redistribution (Krawczyk, 2010; Durante and Putterman, 2014).

income is determined by the combination of performance on a real-effort task (counting the number of certain specific letters in a fixed number of sequences) and luck (a random shock). More importantly, we vary the information presented to individuals at the time of giving (i.e., whether individuals could observe how others' income was determined or not). This allows us to study how individuals react to such information (or lack of it). Finally, in case when individuals do not observe the determinants of income, we elicit individual beliefs about how the income of others is generated.

To our knowledge, our paper offers the first cross-cultural comparison in giving between two countries with opposing beliefs about the determinants of income, using an experiment in which beliefs about such determinants are elicited in an incentive compatible manner.[9] Moreover, our experimental design allows us to answer other interesting questions that the previous studies could not. In particular, we are able to investigate how giving depends on information about how others' income is generated, and whether individuals from different countries have different determinants of giving and beliefs.

Before summarizing our findings, we want to emphasize that even though our study was conducted at two select universities in the US and Spain, the survey that we conducted after the experiment replicates all major patterns reported in the World Values Survey (e.g., attitudes towards inequality, beliefs about the determinants of income, and family values), suggesting that our sample of participants is representative of general population to a large extent.

Coming back to our results, we find that both culture and information affect individual giving. Our results indicate that while the overall amount of giving is similar between the two countries when participants are informed about the determinants of others' income, there exist

[9] There is some work examining the impact of beliefs on redistributive preferences (Fong, 2001, 2007). In particular, Fong (2007) studies the determinants of generosity by controlling how much information participants have regarding the real-life welfare of recipients.

important cross-cultural differences when individuals are uninformed, with Americans giving less and Spanish giving more. Culture and information not only affect individual giving, but also the determinants of giving. Spanish and American participants condition their giving on income of others when they are informed about how this income is generated, but not when uninformed. When uninformed, Americans condition their giving on their income from performance whereas Spanish do not. Examining individual beliefs about how income of others is generated, we find that Spanish more than Americans attribute others' higher income to luck, using their own income as a reference point. Beliefs partially moderate cross-cultural differences in giving.

We describe the experimental design and procedures in detail in Section 2. Main results are presented in Section 3. We discuss implications of our results in Section 4.

2. Experimental Design and Procedures

We conducted sixteen experimental sessions at Universitat Pompeu Fabra in Barcelona, Spain and University of Michigan, USA.[10] A total of 280 individuals participated in the study. The computerized experimental sessions used z-Tree experimental software (Fischbacher, 2007). Participants were given the instructions (available in Appendix A) at the beginning of the session and the experimenter read the instructions aloud.[11] At the end of the experiment, participants were paid in private and in cash.

Experiments were double-blind. Nobody, not even the experimenter, knew how much each participant earned from the experiment. Participants earned approximately $20 (15€) on average, and sessions (including instruction time) lasted approximately 70 minutes. Instructions

[10] Both universities share similar aspects: they are both one of the largest universities in their countries, and they are both public schools.

[11] Two coauthors of this paper ran the initial sessions together to agree on the same experimental procedures and then followed it independently for the rest of the experiments.

were written in English and then translated into Spanish. Two independent assistants translated the instructions back to English to check for any inconsistencies.

In the first stage of the experiment (the earning stage) all participants had 30 minutes to count the sum of "a" and "d" characters contained in the same 50-character sequences which were presented to all participants in the same order. This information was made common knowledge such that differences in outcomes could not be attributed to possible differences in the difficulty of the task.[12] Characters included letters, punctuation marks, numbers, and symbols. Each participant worked on the task independently. Participants were told that their earnings (net-income) was determined by the sum of the number of correct counts (individual income from performance) and a random shock (individual income from luck) drawn from a discrete uniform distribution which could take values -50, -25, 0, +25, or +50.[13] Participants were also told that they could stop counting characters or take a break whenever they want, and in fact, newspapers were left on each participants' desk to reduce stigma on shrinking.

In the second stage of the experiment, the giving stage, participants were matched in pairs and each participant had an opportunity to give part of his/her income to another participant (a two-player dictator game). Each participant received the information about their own income, own number of correct counts and their own random shock. In the INFO treatment, participants also received the same information about their matched participant, while in the NOINFO treatment, participants were only told about the net income of their matched participant (i.e., the

[12] There were 300 sequences, which is more than anyone could finish within the allocated time. The task is inspired by Gneezy and List (2006), who use data entry in a university library. Our task is similar to Abeler et al. (2011), where participants had to count the number of zeros in tables that consist of 150 randomly ordered zeros and ones. Such tasks are mainly effort-related and not skill-related, i.e., success in such a task is mainly attributed to hard work more than to individual skill.

[13] We used a piece rate scheme and a task not depending on cultural differences and/or skill in order to control for preferences for competition across different cultures and to minimize the role of skill/knowledge on earnings. Some experiments employ tournaments to determine earnings, or rely on skill or knowledge related tasks (Erkal et al., 2011; Cherry et al., 2002). In case the random shock was negative and the number of correct counts was less than the absolute value of the random shock, the computer set earnings for the first part to zero.

sum of the random shock and number of correct counts). For each pair, the computer randomly determined which of the two decisions would count to determine payments.[14]

Finally, the NOINFO treatment contained a (surprise) third stage, which was not present in the INFO treatment. In this third stage, we used incentivized elicitation of participants' beliefs about the other participant's random shock, rewarding an exact correct guess with 10 tokens.

At the end of the experiment, and while participants waited to be paid, they filled up a questionnaire (available in Appendix B) eliciting self-reported measures about perceptions, personal characteristics and values. At the end of the experiments, participants' earnings were converted to US Dollars or Euros at a conversion rate of 1 token = \$0.15 and 1 token = 0.1€, which was very close to the currency exchange rate at the time. In the following, all results will be reported in tokens.

3. Results

3.1. Aggregate Effects

Before examining individual giving, it is important to emphasize that based on the Wilcoxon rank-sum test we do not find any significant differences in performance between participants in Spain and the US (82.2 versus 79.1, p-value = 0.14).[15] Therefore, any difference in giving between the two countries cannot be attributed to aggregate differences in income. Looking at the level of individual giving, we observe relatively lower average giving (an average of 3% of income) and lower proportion of positive giving (an average of 29% of all giving) than in most previous experimental studies (Camerer, 2003). This may be partially due to our double

[14] Iriberri and Rey-Biel (2011) show that in modified dictator games individuals give more when the role of dictator is fixed rather than uncertain. Brandts and Charness (2011) survey the methodological literature on the strategic methods and point out their validity. In any case, the cross country comparison should not be affected.
[15] All reported results use two-tailed tests.

blind experimental procedure and partially due to entitlements of earned income (Hoffman et al., 1994; Cherry et al., 2002).

Figure 1 shows the average giving by treatment and country.[16] Using the Wilcoxon rank-sum test, we find no significant cross-cultural differences in giving in the INFO treatment (1.9 versus 2.4, p-value = 0.57). Moving from the INFO to NOINFO treatment, we find that Spanish participants increase their average giving from 1.9 to 4.4 (p-value = 0.21), while Americans decrease their giving from 2.4 to 1.3 (p-value = 0.16).[17] As a result, in the NOINFO treatment, the average giving in Spain is higher than giving in the USA and the difference is statistically significant based on the two-tailed Wilcoxon rank-sum test (4.4 versus 1.3, p-value = 0.04).

Result 1: There are no cross-cultural differences in giving when individuals are informed about the determinants of others' income, but when uninformed, Americans give less than Spanish.

Figure 2 provides a comparison of giving distributions by treatment and country. Examining the proportion of positive giving in the INFO treatment, we find no significant difference between proportion of positive giving in Spain and the US (28% versus 32%, p-value = 0.63). The proportion of positive giving in the NOINFO treatment is marginally higher in Spain than in the US (34% versus 22%, p-value = 0.09). So, part of the difference in giving between Spanish and Americans in the NOINFO treatment, is due to higher proportion of positive giving by Spanish.

[16] Results reported in the paper do not include the three outliers who gave all their earnings. Including or excluding them only affect the averages but do not affect the qualitative results of the paper. Results without eliminating the outliers can be requested from the authors.

[17] We have also run Tobit regressions to formally test the effect of information by controlling for the own income from performance, own income from shock and the paired participant's net income. We cannot reject the hypothesis that Spanish do not change their giving between INFO and NOINFO (p-value = 0.14) but Americans significantly decrease their giving when uninformed (p-value = 0.05). The interaction between being uninformed and being an American is studied in detail in the following subsections.

Why are there significant differences in giving across cultures in the NOINFO treatment? To answer this question we examine the determinants of giving and beliefs across countries.

3.2. The Determinants of Giving

Although nonparametric tests give us insights about giving decisions across treatments and countries, they are not entirely informative since they do not control for important variables, such as individual performance and luck. We thus turn to regression analysis to control for these relevant factors in giving decisions.

Table 1 reports Tobit regressions with robust standard errors, where the dependent variable in all regressions is *giving*.[18] Regressions (1) and (2) use the individuals' income from performance (*own-income* and *other-income*) and individuals' income from random shock (*own-luck* and *other-luck*) as the independent variables. Regression (1) indicates that, in the INFO treatment, Spanish participants condition their giving on *own-luck* and *other-income*, with giving increasing in own luck and decreasing in the other's income. Previous studies on two-person dictator games (i.e., Hoffman et al., 1994; Cherry et al., 2002; Cappelen et al., 2007) suggest that individuals are more generous when their wealth depends solely on a random shock, which would explain why participants who receive a positive shock increase their giving. Also, it is intuitive that participants observing higher *other-income* may conclude that such participants do not need additional income.[19] Regression (2) shows that, similar to Spanish participants, Americans condition their giving on *own-luck* and *other-income*. We also find that Americans condition their giving on *own-income*, with giving increasing in own income. However, when we

[18] We choose to use Tobit regression analysis since the majority of giving in the INFO and NOINFO is 0. We also included giving of 1 token as evidence of censoring, since such gifts have no significant monetary bearing (1 token = $0.15).

[19] Perhaps individuals with low performance in the real-effort task receive higher transfers, partly because they generate low income and partly because they are perceived as low skilled.

pool the data from both countries, as in regression (3), we find that only *own-luck* and *other-income* significantly impact giving. Moreover, there are no significant interaction effects with a country specific dummy *usa*, suggesting that in the INFO treatment determinants of giving are similar across countries.

Result 2: When informed about how others' income is generated, both Americans and Spanish increase their giving in own luck and decrease in the other's income.

Next, we examine the determinants of giving in the NOINFO treatment. Recall that in this treatment participants were not informed about the other participant's income from performance or random shock, but only the other participant's net income. Therefore, instead of using *other-income* and *other-luck* variables we use *other-net-income* as a dependent variable. Regression (4) indicates that when uninformed Spanish participants condition their giving solely on *own-luck*, with giving increasing in the own luck. Regression (5) indicates that American participants condition their giving on *own-income*, with giving increasing in own income. In contrast to the INFO treatment, we find that neither Americans nor Spanish condition their giving on *other-net-income* in the NOINFO treatment. Again, to facilitate the cross-country comparison, regression (6) adds a country specific dummy *usa*, as well as interaction of this dummy with other relevant variables. Consistent with the non-parametric analysis, we find that American participants give significantly less than Spanish. Also, we find a significant positive interaction *usa*×*own-income*, suggesting that Americans give more than Spanish as they have more income.

Result 3: When uninformed about how others' income is generated, both Americans and Spanish increase their giving in own luck, while Americans also increase their giving in own income from performance.

In summary, we find that both culture and information affect the determinants of giving. Spanish and American participants condition their giving on income of others when they are informed about how this income is generated, but not when uninformed. Also, when participants are uninformed, we find an important cross-cultural difference in the determinants of giving: Americans condition their giving on their income from performance whereas Spanish do not.

3.3. Beliefs about luck

Recall that in the NOINFO treatment, besides giving, we elicited individuals' beliefs about the random shock (luck) of the paired participant. In this section we want to examine what the main determinants of such beliefs are and whether such beliefs can explain differences in cross-cultural giving.

Table 2 reports ordered logistic regressions with robust standard errors, where the dependent variable is *luck-belief* with three categories: luck plays a positive role (*luck-belief* = 1), luck plays no role (*luck-belief* = 0), and luck plays a negative role (*luck-belief* = -1) in generating income. The independent variables are the individual's income from performance (*own-income*), individual's income from random shock (*own-luck*), and the other individual's net income (*other-net-income*). Not surprisingly, in all regressions we find strong positive correlation between *luck-belief* and *other-net-income*, suggesting that when participants observe higher income of others, they tend to believe that such high income was significantly influenced by luck. In other words, when participants see high income, they tend to believe that luck played an important role. Comparing the *other-net-income* coefficient in regression (1) and regression (2), we see that such correlation is higher for Spanish participants than Americans. Regression (3) confirms this by showing that the interaction term between *usa* and *other-net-income* is

negative, although it is not significant at the conventional levels (p-value = 0.16). However, if we instead define *luck-belief* as a binary variable taking value 1 for positive belief (i.e., belief that luck plays a positive role in generating income) and 0 otherwise, then the difference between the coefficients in front of *other-net-income* becomes three times higher for Spanish participants than Americans and the difference is significant at the 1% significance level (see Table C1 in Appendix C).

Regression (1) also shows that beliefs of Spanish participants are significantly correlated with *own-income*, with lower income individuals guessing higher random shock for others. Regression (2) shows a much weaker relationship for Americans. Regression (3) confirms this by showing that the interaction term between *usa* and *own-income* is significant, suggesting that Spanish more than Americans condition their beliefs on their own income. This result is even stronger when *luck-belief* is defined as a binary variable (see Table C1 in Appendix C).

These findings suggest that Spanish more than Americans attribute higher earnings to factors not under an individual's control. To the best of our knowledge, this is the first study that confirms the findings based on the World Values Survey (Alesina et al., 2001; Alesina and Glaeser, 2004) in an incentivized manner.

Result 4: When forming beliefs about how income of others is generated, Spanish more than Americans attribute higher income of others to luck, using their own income as a reference point.

An important question is whether differences in beliefs can explain observed differences in giving between Americans and Spanish participants in the NOINFO treatment. To examine this question, we estimate a Tobit regression similar to regression (6) in Table 1, where *giving* is the dependent variable, and the independent variables are the individual's own income from

performance (*own-income*), individual's own random shock (*own-luck*) and the other individual's net income (*other-net-income*). The regression also includes a country specific dummy *usa*, as well as interaction of this dummy with other relevant variables. The new independent variable of interest is *luck-belief*.

Table 3 reports estimation results. For convenience, regression (1) in Table 3 is the same as the regression previously reported in Table 1. Recall that we found in the NOINFO treatment that Americans give significantly less than Spanish, which is indicated by a significant dummy *usa*. The only difference in regression (2) is that we add a control for beliefs. Although *luck-belief* variable is not significant, it reduces both the significance and the magnitude of the *usa* dummy, suggesting that to a certain extent beliefs moderate cross-cultural differences in giving. It is also important to note that the cross-cultural differences, especially the result that Americans (but not Spanish) increase their giving with income, remains even after controlling for beliefs.[20]

Result 5: Beliefs partially moderate cross-cultural differences in giving.

In summary, we find that when forming beliefs about how income of others is generated, Spanish more than Americans attribute others' higher income to luck, using their own income as a reference point. Moreover, differences in beliefs can partially explain (moderate) cross-cultural differences in giving.

3.4. Personal characteristics and giving

Before the experiment concluded, participants answered questions regarding their personal characteristics and values (see Table 4).[21] For example, we asked participants to report

[20] For robustness check we have also estimated a similar regression directly using the *luck-belief* variable taking values -50, -25, 0, 25 and 50. There are no qualitative differences (see Table C2 in Appendix C).

[21] Questionnaire data from session 8 of our experiment was lost due to a problem with the server. Thus, we only include data from the remaining sessions.

how *hard* they think they had worked on the real-effort task, using a scale from 1 to 10. Participants also reported their *gender*, *age*, *birthplace*, *income*, and what *proportion* of that income comes from their own work, as well as their personal values regarding issues such as *family*, *religion*, *leisure*, *work*, their political orientation (*politics*), and their attitude towards *government* responsibilities. The variables *family*, *religion*, and *leisure* take values from 1 to 6 where 1 corresponds to "extremely important" and 6 corresponds to "not important at all." The variable *work* takes values from 1 to 7, where 1 corresponds to participant thinking the change 'Less importance placed on work in our lives' is "extremely desirable" and 7 corresponds to participant thinking the same change is "extremely undesirable." The variable *politics* takes values from 1 to 7, where 1 corresponds to "extreme left" and 7 corresponds to "extreme right." The variable *government* takes values from 1 to 7 where 1 corresponds to participant completely agreeing that government should take more responsibility to ensure that everyone is provided for, and 7 corresponds to participant completely disagreeing with this statement. Finally, participants were asked whether they think that hard work brings success or whether success is a matter of *luck* and connections. The variable *luck* takes values from 1 to 7, where 1 corresponds to participant completing agreeing with that statement and 7 corresponds to participant completely disagreeing.[22]

Table 4 shows that although gender and age composition of our participant pools are similar, there are several important differences across cultures. First, we see that Americans report higher numbers than Spanish when they are asked about how *hard* they think they had worked on the real-effort task, even though the number of correct counts is very similar across

[22] While we have also elicited *birthplace*, we later figured that this variable was not exactly serving our purposes well. For example, instead of birthplace, a measure for where a participant was raised would be a better measure for cultural proxy.

the two countries.[23] Second, Americans have higher *income* and higher *family* values. Americans also report that they are more religious and they put more importance on leisure time.[24] Spanish participants are more likely to believe that "hard work doesn't bring success" and that "the government should take more responsibility to ensure everyone is provided for" and stated that they are more left-oriented in politics. Spanish agreed more with the statement "less importance should be placed on work in our lives." Note that these responses are consistent with previous research using the World Values Survey (Alesina et al., 2001; Alesina and Glaeser, 2004), suggesting that our sample of participants is representative of general population (at least along these dimensions).

Result 6: The survey responses by American and Spanish participants of our experiment replicate all major patterns reported in the World Values Survey (e.g., attitudes towards inequality, beliefs about the determinants of income, and family values).

Next, we examine how personal characteristics and values impact giving. Given a relatively small number of observations we need to pool the data from all treatments. We begin by estimating a simple Tobit regression where *giving* is the dependent variable, and the independent variables are *usa* dummy, *noinfo* dummy, and *usa*×*noinfo* interaction. Table 5 reports the results. Consistent with our previous non-parametric analysis, regression (1) shows sizable and significant interaction between *usa* and *noinfo*, suggesting Americans give less than Spanish in the NOINFO treatment. This effect remains when we control for *own-income*, *own-luck*, and *other-net-income*, see regression (2), or when we control for personal characteristics

[23] We check whether averages may be misleading by studying the distribution of answers for this question. We see striking differences. There is only 1 participant in Spain who reported a 9 and none of the participants reported a 10 in this question, while over 40% of Americans report either a 9 or a 10. In addition, when we regress correct counts on the level of how hard a participant reported to work, there is a strong positive relationship for Americans (p-value < 0.01) but not for Spanish (p-value = 0.67). One explanation is that Americans put a higher value on being perceived as hardworking individuals compared to Spanish.

[24] Reporting a higher value for leisure does not necessarily mean Americans enjoy longer leisure time. In contrary, they may be valuing leisure more if they have (or perceive to have) a lower level of leisure time.

described in Table 4, see regression (3). The pooled regression (4) reiterates these findings. Besides gender, which is marginally significant, we find no significant effect of personal characteristics on giving in our experiment.[25]

4. Discussion

Despite abundant research on the subject, why Europeans redistribute more heavily than Americans is largely unknown. To address this issue we designed a novel experiment to study how individuals condition their giving on income and luck, and how culture and information affect this relationship. We conduct our experiment in the US and Spain, which have different beliefs about how income inequality arises. Our results can be grouped into three major findings. First, we find that both culture and information affect individual giving. Giving is similar across cultures when individuals are informed about how others' income is generated. However, when individuals are uninformed, Americans give less while Spanish give more. Second, we find that culture and information affect the determinants of giving. Individuals from both cultures condition their giving on income of others when they are informed about how this income is generated, but not when uninformed. When uninformed, Americans condition their giving on their income from performance whereas Spanish do not. Third, when forming beliefs about how income of others is generated, Spanish more than Americans attribute higher income of others to luck and these beliefs partially moderate cross-cultural differences in giving.

In sum, we do not find any differences in preferences for giving between the US and Spain when individuals are informed about how income is generated. Cross-cultural differences in giving arise only when individuals are uninformed. Our findings show that the reason why

[25] For a robustness check, we have also tried to estimate several regressions with different interactions between variables used in Table 1 and dummy *usa* (see Table C3 in Appendix C).

Americans differ in their preferences for giving from Europeans is due to differences in beliefs about how income inequality arises. To the best of our knowledge, this is the first study that confirms the findings based on the World Values Survey (Alesina et al., 2001; Alesina and Glaeser, 2004) in an incentivized manner. Our study also provides empirical support of the theoretical predictions of Alesina and Angeletos (2005). Specifically, we find that Spanish more than Americans attribute higher earnings to factors not under an individual's control. Moreover, the differences in beliefs partially explain cross-cultural differences in giving. Note that, in addition to the behavioral explanations, Alesina et al. (2001) and Alesina and Glaeser (2004) have discussed other possible explanations for why redistribution in Europe is more extensive than in the US, including economic, political and historical explanations. The purpose of our paper is not to say that there is only one possible explanation, but to use a simple controlled experiment to demonstrate that information and beliefs about how income of others is generated are important in explaining cross-cultural differences in giving.

Of course, our results on cross-cultural differences in giving should be taken with caution since we have only one location from each country. It is possible that location and geography also play a role. However, our main point is still valid. Our study uses two very different subject pools, whose responses are consistent with the findings of the World Values Survey. Moreover, our treatment manipulations target the question of how these two different populations change their giving behavior in response to information about how income of others is generated.

Our study contributes to several areas of research. First, our study contributes to the discussion about different fairness ideals such as strict egalitarianism, libertarianism, and liberal egalitarianism (Konow, 2000; Cappelen et al., 2007). While strict egalitarians consider equal sharing a fair distribution, libertarians oppose redistribution and liberal egalitarians believe

individuals should not be held responsible for circumstances beyond their control. As in Cappelen et al. (2007, 2013), in a two-person dictator game, we find some evidence for liberal egalitarianism both for Spanish and American participants since, when informed about the determinants of others' income, they condition their giving on *own-luck* (see Table 1).[26] Our results are thus linked to Konow's *accountability principle* (Konow, 1996; Konow, 2000), which states that rewards should be allocated in proportion to the relevant variables that an individual can influence (i.e., earning income from performance) but not according to those that he cannot influence (i.e., earning income from luck).

Our study also sheds light on why previous studies do not always agree on what is the relationship between the level of income and giving, i.e. positive, negative or non-monotonic (Andreoni and Vesterlund, 2001; Buckley and Croson, 2006; Eckel et al., 2007; Erkal et al., 2011). In particular, the results of our experiment suggest that the uncertainty about how income is generated and cultural differences affect the relationship between income and giving. Therefore, our paper suggests that findings from studies on generosity that took place in Europe may not always be consistent with findings from studies in the US and vice versa. This highlights the importance of replication in order to see how much of the findings presented in this and other studies could be generalized.

There are important policy implications of our study. For example, one implication is for charitable organizations in the US. Our paper suggests that Americans do not have different tastes in terms of the level of giving when individuals are informed about the causes of poverty, but they give less compared to Europeans when they are uninformed. This would also be consistent with why Americans like to direct a big portion of their giving to underdeveloped

[26] Cappelen et al. (2007) conducted their experiment in Norway, while Cappelen et al. (2013) conducted their web-based experiment in Norway, Germany, Uganda and Tanzania.

nations where it is obvious that poverty is caused by circumstances beyond individual control. Charitable organizations could benefit from providing more information to their potential donors.

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Table 1: The determinants of giving by treatment and country.

Treatment	INFO	INFO	INFO	NOINFO	NOINFO	NOINFO
Country	Spain	US	Spain and US	Spain	US	Spain and US
Dependent variable, *giving*	(1)	(2)	(3)	(4)	(5)	(6)
usa			-23.39			-44.88**
			(15.55)			(21.82)
own-income	0.00	0.21**	0.00	-0.18	0.25**	-0.16
	(0.10)	(0.08)	(0.10)	(0.17)	(0.10)	(0.16)
usa×own-income			0.21			0.52**
			(0.13)			(0.20)
own-luck	0.12**	0.09*	0.12**	0.18**	0.02	0.16**
	(0.05)	(0.05)	(0.05)	(0.09)	(0.07)	(0.08)
usa×own-luck			-0.03			-0.13
			(0.06)			(0.12)
other-income	-0.30**	-0.20**	-0.30***			
	(0.12)	(0.10)	(0.11)			
usa×other-income			0.10			
			(0.14)			
other-luck	-0.04	0.01	-0.04			
	(0.05)	(0.05)	(0.05)			
usa×other-luck			0.05			
			(0.07)			
other-net-income				0.10	0.01	0.10
				(0.09)	(0.06)	(0.08)
usa×other-net-income						-0.08
						(0.11)
constant	15.84	-7.47	15.8	-6.53	-34.26***	-5.91
	(11.71)	(10.65)	(11.71)	(19.76)	(10.85)	(18.32)
Observations	72	60	132	76	69	145

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Table 2: The determinants of beliefs in the NOINFO treatment by country.

Treatment	NOINFO	NOINFO	NOINFO
Country	Spain	US	Spain and US
Dependent variable, *luck-belief*	(1)	(2)	(3)
usa			-2.69
			(2.04)
own-income	-0.11***	-0.03*	-0.10***
	(0.03)	(0.02)	(0.02)
usa×own-income			0.06**
			(0.03)
own-luck	0.00	0.00	0.00
	(0.01)	(0.01)	(0.01)
usa×own-luck			0.00
			(0.01)
other-net-income	0.11***	0.07***	0.10***
	(0.03)	(0.01)	(0.02)
usa×other-net-income			-0.03
			(0.02)
Observations	76	69	145

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Table 3: The impact of beliefs about luck on giving.

Treatment	NOINFO	NOINFO
Country	Spain and US	Spain and US
Dependent variable, *giving*	(1)	(2)
usa	-44.88**	-41.03*
	(21.82)	(22.25)
own-income	-0.16	-0.22
	(0.16)	(0.17)
usa×own-income	0.52**	0.58***
	(0.20)	(0.21)
own-luck	0.16**	0.16**
	(0.08)	(0.08)
usa×own-luck	-0.13	-0.13
	(0.12)	(0.12)
other-net-income	0.10	0.18
	(0.08)	(0.12)
usa×other-net-income	-0.08	-0.19
	(0.11)	(0.19)
luck-belief		-4.88
		(5.09)
usa×luck-belief		6.62
		(8.38)
constant	-5.91	-7.63
	(18.32)	(18.48)
Observations	145	145

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Table 4: Personal characteristics.

Country	Spain			US			Mann-Whitney test
	Mean	Min	Max	Mean	Min	Max	p-value
hard	5.66	1	9	7.96	1	10	0.00***
	(1.79)			(2.15)			
female	0.57	0	1	0.53	0	1	0.53
	(0.50)			(0.50)			
age	21.52	18	38	21.51	18	43	0.85
	(3.11)			(3.55)			
income	1.49	1	3	1.78	1	3	0.00***
	(0.68)			(0.79)			
proportion	2.62	1	4	2.50	1	4	0.48
	(1.36)			(1.33)			
family	2.07	1	5	1.88	1	6	0.01***
	(0.90)			(1.12)			
religion	5.39	1	6	4.05	1	6	0.00***
	(1.11)			(1.72)			
leisure	2.55	1	5	2.40	1	6	0.10*
	(0.76)			(1.01)			
politics	3.03	1	7	3.39	1	7	0.03**
	(1.25)			(1.35)			
work	3.39	1	7	3.64	1	6	0.06*
	(1.37)			(1.32)			
luck	3.81	1	7	4.69	1	7	0.00***
	(1.47)			(1.49)			
government	2.55	1	7	3.37	1	7	0.00***
	(1.43)			(1.67)			

Note: * indicates statistical significance at 10% level, ** at 5%; and *** at 1%. Standard deviation in parentheses. Spain has 148 and US has 119 data points.

Table 5: Personal characteristics and giving.

Dependent variable, *giving*	(1)	(2)	(3)	(4)
usa	2.25	2.63	4.33	2.52
	(3.47)	(3.40)	(3.50)	(3.88)
noinfo	6.14*	5.42	6.19*	5.21
	(3.69)	(3.54)	(3.56)	(3.39)
usa×noinfo	-12.42**	-11.93**	-12.16**	-11.19**
	(5.48)	(5.43)	(5.08)	(5.12)
own-income		0.12		0.11
		(0.08)		(0.07)
own-luck		0.11***		0.10***
		(0.03)		(0.03)
other-net-income		0.02		0.02
		(0.03)		(0.03)
hard				0.70
				(0.63)
female			-4.68*	-4.95*
			(2.55)	(2.56)
age			0.61	0.57
			(0.39)	(0.37)
income			0.76	0.94
			(1.69)	(1.63)
proportion			0.89	0.90
			(0.99)	(0.98)
family			-0.91	-0.67
			(1.33)	(1.35)
religion			1.04	0.76
			(0.91)	(0.90)
leisure			1.66	1.73
			(1.30)	(1.22)
politics			-0.18	-0.17
			(1.04)	(1.04)
work			0.70	1.05
			(0.86)	(0.89)
luck			-0.82	-0.97
			(0.89)	(0.91)
government			-1.07	-1.25
			(0.89)	(0.86)
constant	-11.99***	-23.84***	-29.38**	-42.68**
	(3.31)	(8.60)	(14.42)	(17.44)
Observations	277	277	267	267

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Figure 1: Average giving by treatment and country.

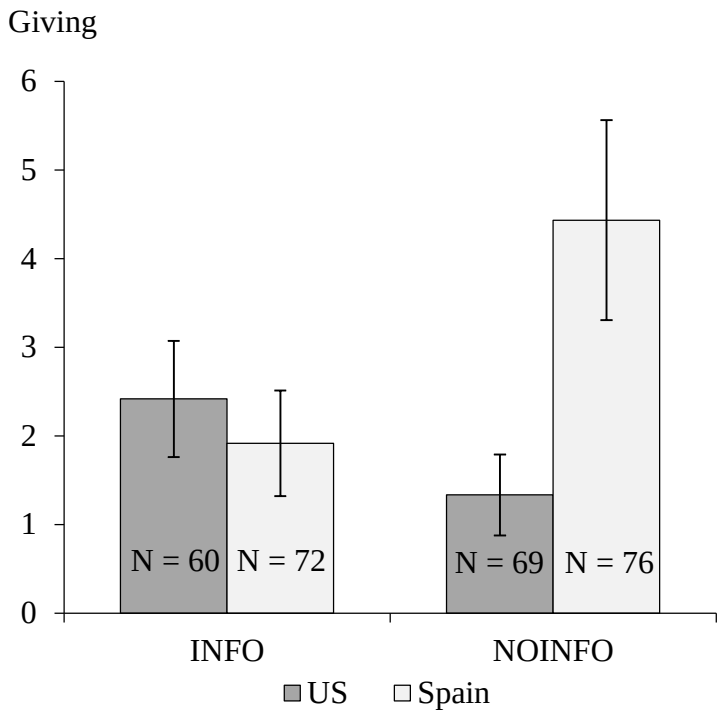
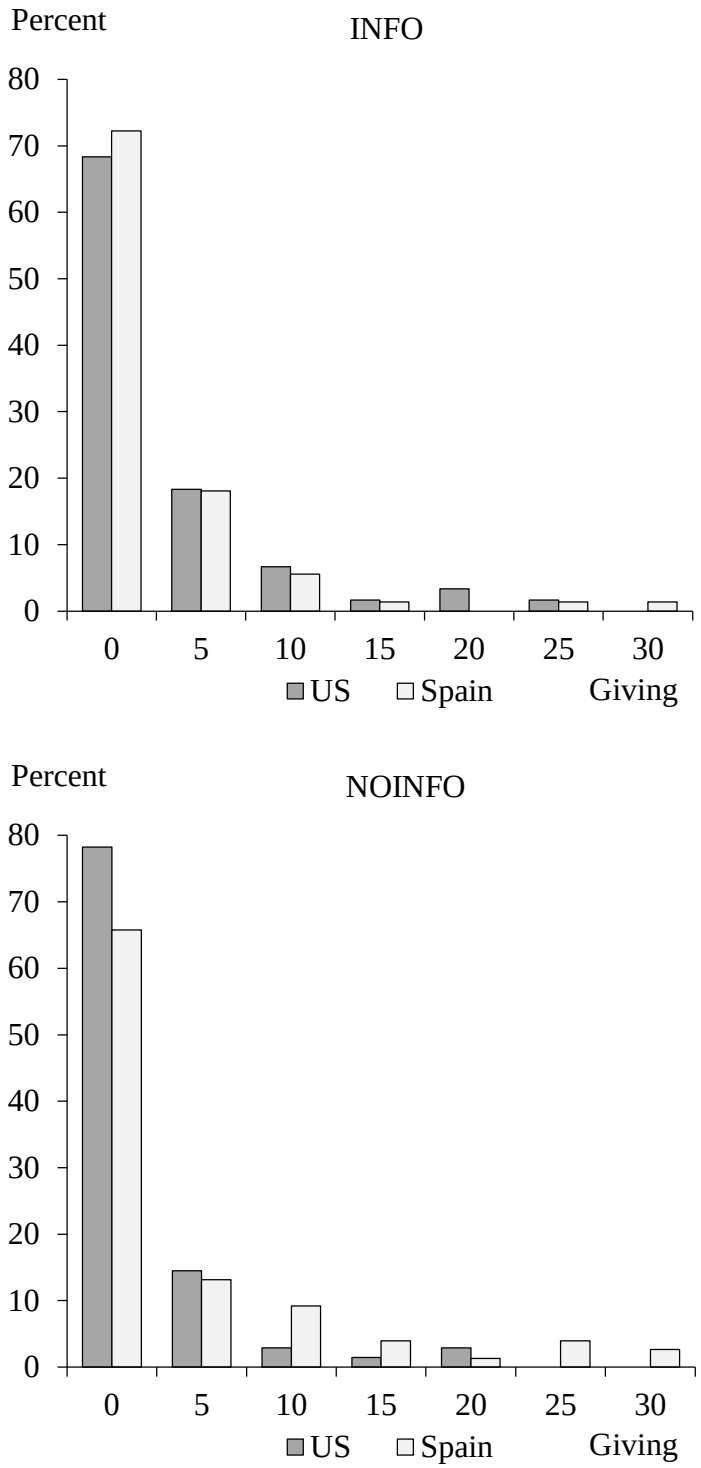


Figure 2: Distribution of giving by treatment and country.



Appendix A – Instructions for the NOINFO Treatment

Below you can find the instructions for the treatment with no information regarding the determinants of others' income. Instructions for the treatment with information are identical with the exception that the screen in Part II containing information about the other subjects' earnings also includes the number of correct answer and the random number of the paired subject. Instructions for the treatment with information did not contain a Part III of the experiment, where beliefs were elicited.

General Instructions

Thank you for agreeing to participate in this experiment. Several research agencies have provided funds for this research. Please make sure your cell phones are turned off to avoid interruptions during the proceedings.

This experiment deals with individual decision making. Your participation in this experiment is voluntary. As you know, you will be compensated for your participation; if you read the instructions carefully, you can, depending on yours and other participants' decisions, earn a considerable amount of money in addition to the **$7 participation fee**. The currency used in the experiment is tokens. Tokens will be converted to US dollars at a rate of **1 token to 0.15 US dollars**.

The experiment consists of two parts. You will be provided with instructions for Part I of the experiment. After Part I of the experiment is over, you will be provided with instructions for Part II. While you wait to be paid, you will be asked to fill out a questionnaire.

In our experiment, all records will be linked to an anonymous subject ID. At the end of the experiment, you will be paid privately and anonymously. The experimenter will get help from one of her assistants to distribute the payments. The assistant does not know which ID belongs to which participant. The assistant will place the earnings of participants in envelopes with matching ID numbers. After closing the envelopes, the assistant will pass the envelopes to the experimenter. Therefore, nobody, not even the experimenter, will be able to link your decisions to your name during or after the experiment.

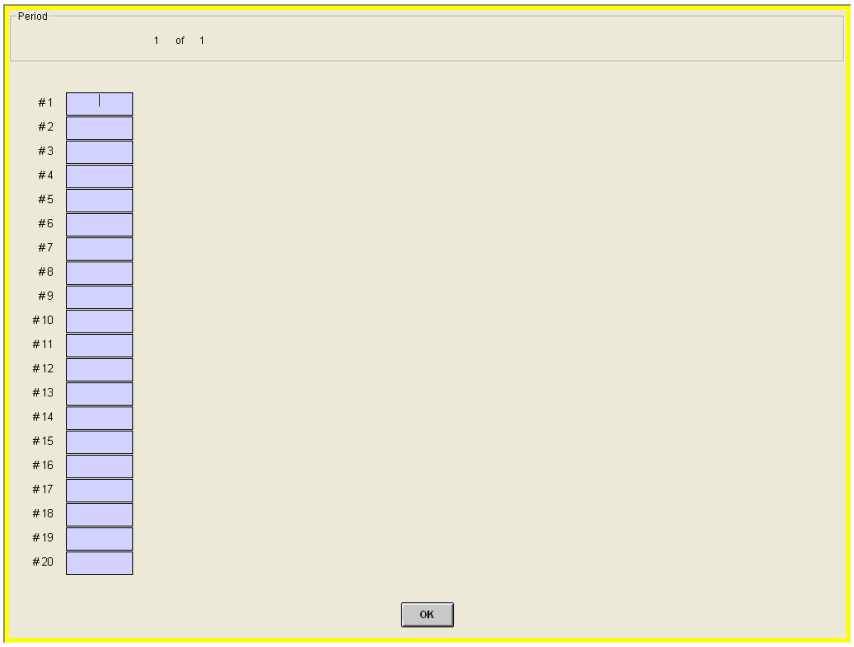
Please do not communicate with the other participants during the experiments. Should you have any questions, please raise your hand. At the end of the experiment we will call you, one at a time, to pay you in private.

Pre-instructions

In the first part of this experiment you will be asked to count **the sum of "a" and "d" characters** in **50-character** sequences. Characters include letters, punctuation marks, numbers, and symbols. Below we provide some examples. Please make sure you understand how we have calculated the sum of "a" and "d" characters in each sequence.

sequence #	50-characters sequence	total number of "a" and "d" characters
1	aaaaaaaaadddaaaaaddaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	50
2	7po6df^gai ps78f adf sdf s&f sdasdf t yhgdua*gf r t g(t r at r a	12
3	p0=j sj d8f j aal kj df l kj ds890aaaaaaaat r ht r - t aat r gt aaaa	19
4	Las9- f akj askl f j al sdj l kj aakl j al ksal j l =- ddt +gt r aaar t	14

Before we start, you will now go through a practice round. Although your final earnings do not depend on the number of correct counts in this practice round, you should try to correctly count all sequences to get practice. We ask you to input into the computer the sum of "a" and "d" characters beside each sequence number, as shown in the following figure.



When you finish, the computer will display the correct sum of "a" and "d" characters next to each sequence. If all your answers are correct, both columns should be the same.

Even if you use the following page to make notes, please remember to input each number in the computer as soon as you have calculated it.

Instructions Part I

In this Part I of the experiment, you will be provided with **300 character sequences**. During **30 minutes** you will be asked to count the sum of **"a" and "d" characters** in each sequence. Your earnings from Part I will depend on your result. Your **result** will be computed by adding a **random number X** to the number of your correct counts:

(your result) = (your number of correct counts) + (your random number X)

where your random number X is randomly drawn by the computer and it can be either **-50, -25, 0, +25, or +50**. Each of these numbers is equally likely to be drawn and may differ for each participant. At the end of this part the computer will make one separate and independent random draw for each participant.

For example, if you correctly count the sum "a" and "d" characters in 82 sequences and the random number X selected by the computer is -25, your result will be 57=(82-25), while if the random number selected by the computer is +50 your result will be 132= (82+50). Numbers in this example are just for illustrative purposes and do not intend to indicate how the computer will choose the random number.

After the 30 minutes of the experiment, the computer will randomly draw your random number X and will calculate your result based on your random number and your number of correct counts. Then the computer will calculate earnings of each participant. Your **earnings** from Part I are calculated by multiplying **your result** by **1 token**:

(your earnings in Part I) = (your result *1 token)

Note: if your random number is negative and the number of correct counts is less than your random number then your result will be negative. In such a case, the computer will set your earnings for this part of the experiment to zero.

You will have **30 minutes** to count the sum of "a" and "d" characters in the 300 sequences we will show you. In any case, you can stop counting characters whenever you want and you do not have to continue until the end. What we

ask you is to keep quite during the 30 minutes. In case you decide to take a break, we have left some newspapers for you to read (you are also allowed to take books and lecture notes and read).

The sentences are provided in paper sheets. You are allowed to use a pen. However, you are asked to enter the sum of "a" and "d" letters before the 30 minutes end to be able to get your earnings.

Please wait until the experimenter gives the start sign.

Instructions Part II

In this Part II of the experiment you are randomly paired with another participant. To preserve anonymity, neither of you will ever learn with whom you are paired with.

At the beginning of Part II, the computer will display **your number of correct counts**, **your random number** (which the computer randomly drew from **-50, -25, 0, +25, or +50**), and **your result** in Part I. Remember, the result from Part I is:

(your result) = (your number of correct counts) + (your random number X)

Finally, the computer will display **your earnings**. Remember, earnings from Part I are calculated by multiplying your result by 1 token:

(your earnings in Part I) = (your result) * (1 token)

The computer will also display the **result**, and the **earnings** in Part I of **your paired participant**. The computer **WILL NOT** show you **the number of correct answer or the random number of your paired participant**. Remember that your paired participant's random number may be different from your random number since the computer makes two separate random draws: one for you and one for your paired participant.

An example of the display screen is shown below:

Once the computer displays the screen above, you will make a decision on **how much you would like to transfer** from your earnings to the other participant's earnings. You will be able to transfer any amount you like. For example, suppose your earnings from Part I is 100 tokens and if the other participant's earnings is 120 tokens. If you

enter a transfer of 15 your final earnings will be 85 (=100-15), and the other participant's final earnings will be 135 (=120+15).

Numbers in this example are just for illustrative purposes and do not intend to indicate how you should make your decisions.

Although both you and your paired participant will make the transfer decisions, the computer will randomly implement only one decision made by either you or your paired participant. However, you will not know whose decision will be implemented until the end of the experiment. Since your decision is implemented with 50% probability, you should pay careful attention to the transfer decision you make.

To summarize, if your decision is randomly picked, then your transfer will decrease your earnings and it will increase your paired participant's earnings. However, you will not get anything from your paired participant's transfer since his/her decision is not implemented. Similarly, if your paired participant's decision is randomly picked, his/her transfer will increase your earnings, and it will decrease his/her earnings. However, you will not transfer anything to your paired participant since your decision is not implemented.

At the end of the experiment you will be paid the total amount of your final income in private and in cash.

In our experiment, all records will be linked to an anonymous subject ID. At the end of the experiment, you will be paid privately and anonymously. The experimenter will get help from one of her assistants to distribute the payments. The assistant does not know which ID belongs to which participant. The assistant will place the earnings of participants in envelopes with matching ID numbers. After closing the envelopes, the assistant will pass the envelopes to the experimenter. Therefore, nobody, not even the experimenter, be able to link your decisions to your name during or after the experiment.

Part III (only for the NOINFO treatment)

In the screen you just saw, the computer only showed you the result and the earnings in Part I of your paired participant. **The computer did not show you the random number of your paired participant.**

In this Part II we ask you to make a prediction about the random number of your paired participant. If your guessing is correct you will receive 10 extra experimental points which will add up to your final earnings. If your prediction is not correct you will not earn any additional point.

Remember that your paired participant's random number can be different from yours since the computer chooses them independently among -50, -25, 0, +25 or +50.

Appendix B – Questionnaire

1. How hard did you work in the first part of the experiment in a scale from 1 to 10?
    a. 1
    b. 2
    c. 3
    d. 4
    e. 5
    f. 6
    g. 7
    h. 8
    i. 9
    j. 10

2. Gender
    a. male
    b. female

3. Age

4. Average Monthly Income (including all income sources such as parent's expenses for you)
    a. less than $500
    b. between $500-1000
    c. more than $1000

5. What proportion of your income comes from your own work
    a. less than 20%
    b. between 20% and 50%
    c. between 50% and 70%
    d. all or almost all

6. What is the importance of family in your life:
    a. extremely important
    b. very important
    c. important
    d. somewhat important
    e. not very important
    f. not important at all

7. What is the importance of religion in your life:
    a. extremely important
    b. very important
    c. important
    d. somewhat important
    e. not very important
    f. not important at all

8. What is the importance of leisure time in your life:
    a. extremely important
    b. very important
    c. important
    d. somewhat important
    e. not very important
    f. not important at all

9. In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?
    a. extreme left
    b. left
    c. left-center
    d. center
    e. right-center
    f. right
    g. extreme right

10. Please tell us whether you think the following change is desirable: “Less importance placed on work in our lives”
    a. extremely desirable
    b. very desirable
    c. desirable
    d. indifferent
    e. not very desirable
    f. undesirable
    g. extremely undesirable

11. How would you place your views on this: “Hard work doesn´t bring success - it´s more a matter of luck and connections”
    a. I completely agree
    b. I agree most of the times
    c. I agree
    d. I am indifferent
    e. I disagree
    f. I disagree most of the times
    g. I completely disagree

12. How would you place your views on this: “The government should take more responsibility to ensure that everyone is provided for”
    a. I completely agree
    b. I agree most of the times
    c. I agree
    d. I am indifferent
    e. I disagree
    f. I disagree most of the times
    g. I completely disagree

13. In what country or region were you born?
    a. North America
    b. Central/South America
    c. Australia/ New Zealand
    d. Other Pacific Nation
    e. South-East Asia
    f. South Asia
    g. Other Asia
    h. Western Europe
    i. Northern Europe
    j. Eastern Europe
    k. Africa

Appendix C – Additional Analysis

Table C1 reports logit regressions with robust standard errors, where the dependent variable is *luck-belief* taking value 1 for positive belief (i.e., belief that luck plays a positive role in generating income) and 0 otherwise. The independent variables are the individual's income from performance (*own-income*), individual's income from random shock (*own-luck*), and the other individual's net income (*other-net-income*). As in Table 2, in all regressions we find strong positive correlation between *luck-belief* and *other-net-income*. Comparing the *other-net-income* coefficient in regression (1) and regression (2), we see that such correlation is three times higher for Spanish participants than Americans. Regression (3) confirms this by showing that the interaction term between *usa* and *other-net-income* is negative and significant at the 1% significance level.

Table C1: The determinants of beliefs in the NOINFO treatment by country.

Treatment	NOINFO	NOINFO	NOINFO
Country	Spain	US	Spain and US
Dependent variable, *luck-belief*	(1)	(2)	(3)
usa			5.10
			(3.92)
own-income	-0.14***	-0.03	-0.14***
	(0.04)	(0.03)	(0.04)
usa×own-income			0.12**
			(0.05)
own-luck	0.00	0.01	0.00
	(0.02)	(0.01)	(0.02)
usa×own-luck			0.00
			(0.03)
other-net-income	0.21***	0.07***	0.21***
	(0.04)	(0.02)	(0.04)
usa×other-net-income			-0.14***
			(0.05)
constant	-9.57***	-4.47*	-9.57***
	(3.13)	(2.39)	(3.12)
Observations	76	69	145

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Table C2 reports Tobit regressions, where *giving* is the dependent variable, and the independent variables are the individual's own income from performance (*own-income*), individual's own random shock (*own-luck*), the other individual's net income (*other-net-income*), and the *luck-belief* variable taking values -50, -25, 0, 25 and 50. The regression also includes a country specific dummy *usa*, as well as interaction of this dummy with other relevant variables. As in Table 3, we find that *luck-belief* partially moderates cross-cultural differences in giving, reducing the magnitude and significance of the *usa* variable.

Table C2: The impact of beliefs about luck on giving.

Treatment	NOINFO	NOINFO
Country	Spain and US	Spain and US
Dependent variable, *giving*	(1)	(2)
usa	-44.88**	-40.75*
	(21.82)	(21.60)
own-income	-0.16	-0.22
	(0.16)	(0.17)
usa×own-income	0.52**	0.62**
	(0.20)	(0.25)
own-luck	0.16**	0.15*
	(0.08)	(0.08)
usa×own-luck	-0.13	-0.12
	(0.12)	(0.12)
other-net-income	0.10	0.19
	(0.08)	(0.14)
usa×other-net-income	-0.08	-0.24
	(0.11)	(0.23)
luck-belief		-0.13
		(0.16)
usa×luck-belief		0.24
		(0.28)
constant	-5.91	-8.51
	(18.32)	(18.76)
Observations	145	145

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.

Table C3 reports Tobit regression where *giving* is the dependent variable, and the independent variables are *usa* dummy, *noinfo* dummy, *usa×noinfo* interaction, as well as *own-income*, *own-luck*, *other-net-income*, personal characteristics described in Table 4, as well as

interactions with *usa*. Besides *female*, which is significant in Table 5, *proportion*, *family*, *age*, *leisure* and *religion* also become significant. However, we caution the reader about interpreting these results because we use 33 variables with only 267 observations. What is more important, however, is that the result that Americans give less in the NOINFO condition becomes even more significant.

Table C3: Personal characteristics and giving.

Dependent variable, *giving*	(1)	(2)
usa	-31.04**	-10.14
	(12.77)	(30.24)
noinfo	5.45	5.64*
	(3.52)	(3.13)
usa×noinfo	-13.06**	-13.92***
	(5.49)	(5.01)
own-income	-0.09	-0.07
	(0.11)	(0.10)
usa×own-income	0.42***	0.41***
	(0.13)	(0.13)
own-luck	0.14***	0.14***
	(0.05)	(0.05)
usa×own-luck	-0.06	-0.04
	(0.07)	(0.07)
other-net-income	0.01	0.00
	(0.05)	(0.05)
*usa*other-net-income*	0.00	0.05
	(0.07)	(0.07)
hard		0.36
		(1.01)
*usa*hard*		0.41
		(1.35)
female		0.18
		(3.45)
*usa*female*		-14.86***
		(5.34)
age		1.17*
		(0.61)
*usa*age*		-0.59
		(0.72)
income		1.77
		(2.60)
*usa*income*		0.89
		(3.67)
proportion		-0.06
		(1.37)
*usa*proportion*		4.58**
		(1.94)
family		-2.87*

		(1.72)
*usa*family*		3.81
		(2.51)
religion		3.56**
		(1.56)
*usa*religion*		-3.95**
		(1.92)
leisure		2.94*
		(1.75)
*usa*leisure*		-0.57
		(2.63)
politics		0.32
		(1.53)
*usa*politics*		-1.11
		(2.12)
work		1.30
		(1.16)
*usa*work*		-1.08
		(1.70)
luck		-1.00
		(1.10)
*usa*luck*		-0.40
		(1.77)
government		-1.31
		(1.11)
*usa*government*		0.70
		(1.58)
constant	-5.92	-55.62**
	(11.86)	(26.10)
Observations	277	267

Note: * indicates statistical significance at the 10% level, ** significant at 5%, and *** at 1%. Robust standard errors are in parentheses.